

Amendments to the Claims

1. (Cancelled)
2. (Previously presented) The apparatus of claim 25, further comprising a backside heating device to emit heat towards a second side of the target area.
3. (Original) The apparatus of claim 2, wherein the backside heating device comprises at least one of a group consisting of a hotplate, a tungsten lamp, and a halogen lamp.
4. (Original) The apparatus of claim 3, wherein the backside heating device further comprises a plurality of heating zones, each heating zone capable of being independently controlled.
5. (Previously presented) The apparatus of claim 25, wherein the reflecting device is a plate-type reflector.
6. (Currently amended) The apparatus of claim 5, further comprising: a vertical axis substantially through the center of the apparatus; and the plurality of first and second reflecting zones being substantially symmetrical around the vertical axis.
7. (Currently amended) The apparatus of claim 6, wherein the plurality of first and second reflecting zones are concentric rings.
8. (Currently amended) The apparatus of claim 25, wherein each of the plurality of first and the second reflecting zones comprises at least one of a group consisting of aluminum, gold, stainless steel, and molybdenum.
9. (Previously presented) The apparatus of claim 25, wherein the flash lamp comprises a plasma-type flash lamp.
10. (Original) The apparatus of claim 9, wherein the plasma-type flash lamp comprises a Xenon lamp or a Mercury lamp.
11. (Previously presented) The apparatus of claim 25, wherein the target area is adapted to receive a substrate.
12. (Original) The apparatus of claim 11, wherein the substrate comprises a 300-mm semiconductor wafer.
13. (Cancelled)

14. (Previously presented) The method for flash lamp processing of claim 26, wherein the reflecting device is a plate-type reflector that is substantially axis-symmetric around a vertical axis.

15. (Previously presented) The method for flash lamp processing of claim 26, further comprising:

heating a second surface of the substrate with a backside heating device to a pre-flash temperature prior to generating radiation from the flash lamp.

16. (Currently amended) The method for flash lamp processing of claim 15, wherein the backside heating device comprises a plurality of heating zones, and the method further includes

independently controlling the plurality of heating zones based at least in part on reflectivity of portions of the substrate.

17. (Previously presented) The method for flash lamp processing of claim 15, further comprising:

activating implanted ions in the first surface of the substrate by heating the second surface to a pre-flash temperature approximately at or below an ion diffusion temperature; and

heating the first surface of substrate to a temperature approximately between the ion diffusion temperature and a substrate melting temperature, said heating the first surface done, at least in part, by radiation generated from the flash lamp.

18. (Previously presented) The method for flash lamp processing of claim 17, wherein the radiation generated from the flash lamp heat the first surface of the substrate to a temperature just below the substrate melting temperature.

19. (Original) The method for flash lamp processing of claim 17, wherein the first surface of the substrate is above the ion diffusion temperature for a time period of approximately three milliseconds or less.

20. (Cancelled)

21. (Previously presented) The system of claim 27, wherein the substrate comprises a semiconductor wafer.

22. (Previously presented) The system of claim 27, wherein the pre-flash processing device comprises one of a group consisting of an ion implantation device, a metal deposition device, a low-k deposition device, and a high-k deposition device.

23. (Previously presented) The system of claim 27, wherein the flash lamp reactor further comprises:

a backside heating device, to emit heat towards a second side of the target area.

24. (Original) The system of claim 23, wherein the backside heating device includes a plurality of heating zones, each heating zone capable of being independently controlled.

25. (Currently amended) An apparatus comprising:
a target area;
a reflecting device having a first reflective-reflecting zone with a first reflectivity and a second reflecting zone with a second reflectivity that is different from the first reflectivity; and
a flash lamp, disposed between the reflecting device and the target area, to provide radiation to be reflected off the reflecting device substantially towards a first side of the target area.

26. (Currently amended) A method for flash lamp processing comprising:
generating radiation from a flash lamp disposed between a reflecting device and a target area; and
reflecting a first portion of the radiation with a first reflecting zone of the reflecting device toward the target area, the first reflecting zone having a first reflectivity; and
reflecting a second portion of the radiation with a second reflecting zone of the reflecting device toward the target area, the second reflecting zone having a second reflectivity that is different from the first reflectivity.

27. (Previously presented) A system comprising:
a pre-flash processing device adapted to process a substrate;
a flash lamp reactor including
a target area adapted to receive the substrate such that the first surface of the substrate corresponds with a first side of the target area;
a reflecting device having a first reflecting zone with a first reflectivity and a second reflecting zone with a second reflectivity that is different from the first reflectivity; and
a flash lamp, disposed between the reflecting device and the target area, to provide radiation to be reflected off the reflecting device substantially towards the first side of the target area; and
a transfer mechanism adapted to transfer the substrate from the pre-flash processing device to the flash lamp reactor.

28. (New) The apparatus of claim 25, wherein the first reflecting zone is configured to reflect radiation received from the flash lamp substantially towards a first area of the first side and the second reflecting zone is configured to reflect radiation received from the flash lamp substantially towards a second area of the first side, which is different than the first area.

29. (New) The apparatus of claim 25, wherein the first reflecting zone is configured to receive radiation provided from the flash lamp in a first direction and the second

reflecting zone is configured to receive radiation provided from the flash lamp in a second direction, which is different from the first direction.

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